Communications Controller

1) **Interface**
   a. **Main**
   b. **Menu**
   c. **Dialogs**

The Communications Controller is used to connect a customer application to the SemiProbe system from either the local system or an external PC or device. Each connection type is described below.

GPIB connection - Used exclusively for external communication to the SemiProbe system. Connection is made through the use of a GPIB to RS232 adapter. Only communication port is changeable by the user

Local Connection - Exclusively used for communication to the SemiProbe system from another application running on the SemiProbe PC. This connection runs through the local IP address of 127.0.0.1 on port 5050.

RS232 Connection - Exclusively used for external communication to the SemiProbe system. Baud Rate, Data Bits, Stop Bits, Parity and communication port are all adjustable by the user. Default Parameters are shown in the table below.

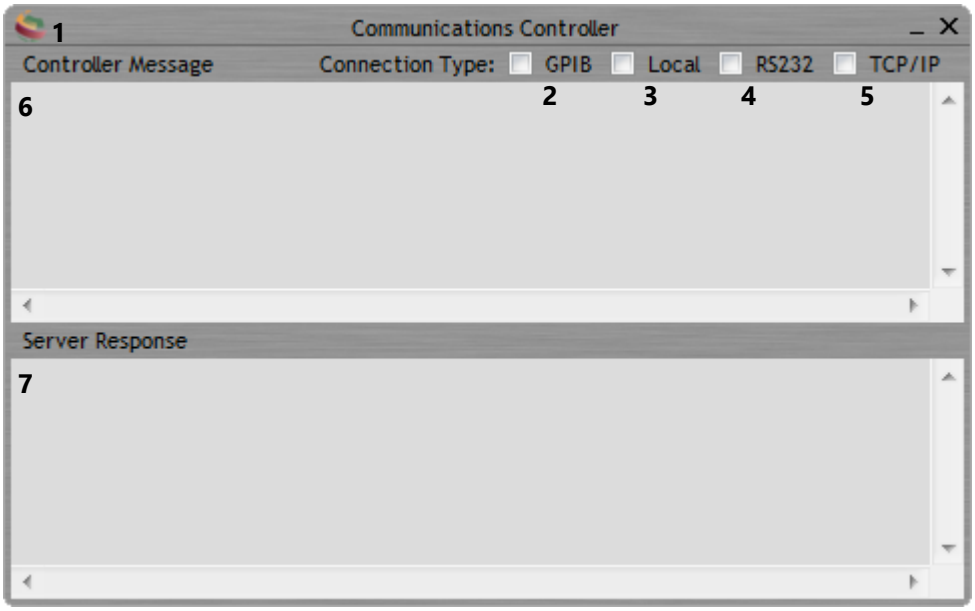
Baud Rate	9600
Data Bits	8
Stop Bits	1
Parity	None

TCP/IP Connection - Exclusively used for external communication to the SemiProbe system. Default port is 4000 and is user changeable.

See the section *Interfacing Custom Applications* for more information on connecting and disconnecting from the Communications Controller.

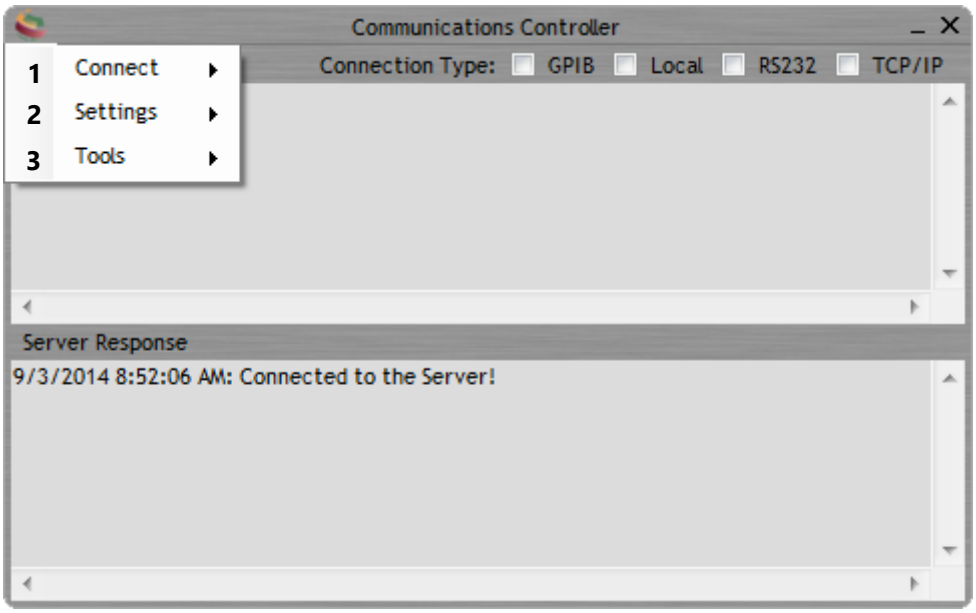
1) Interface

a) Main

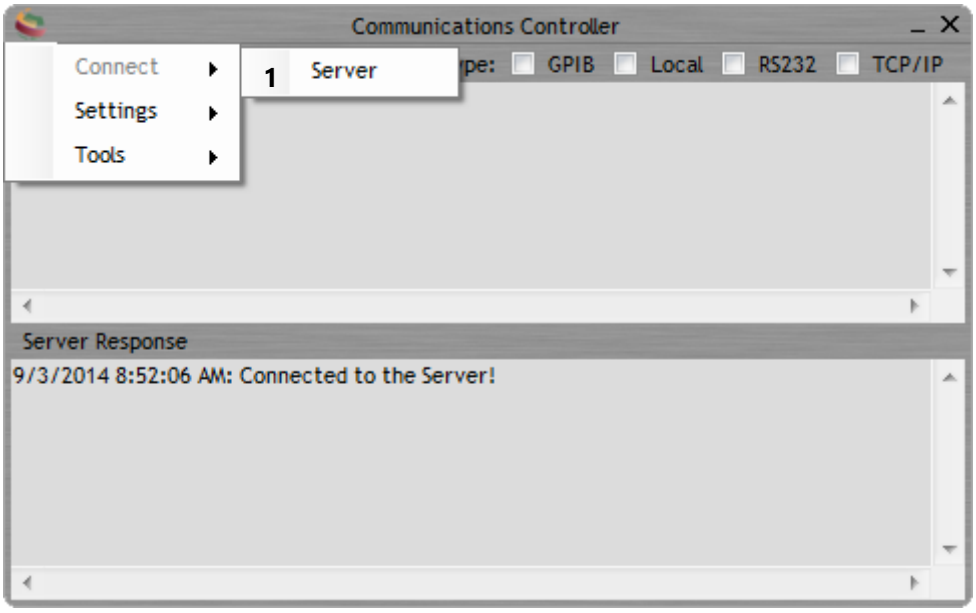


1 Menu
2 GPIB - Open/Close GPIB Connection.
3 Local - Open/Close Local Connection.
4 RS232 - Open/Close RS232 Connection.
5 TCP/IP - Open/Close TCP/IP Connection.
6 Displays messages received from the connected controller device.
7 Displays all communications received from the SemiServer other modules and error messages.

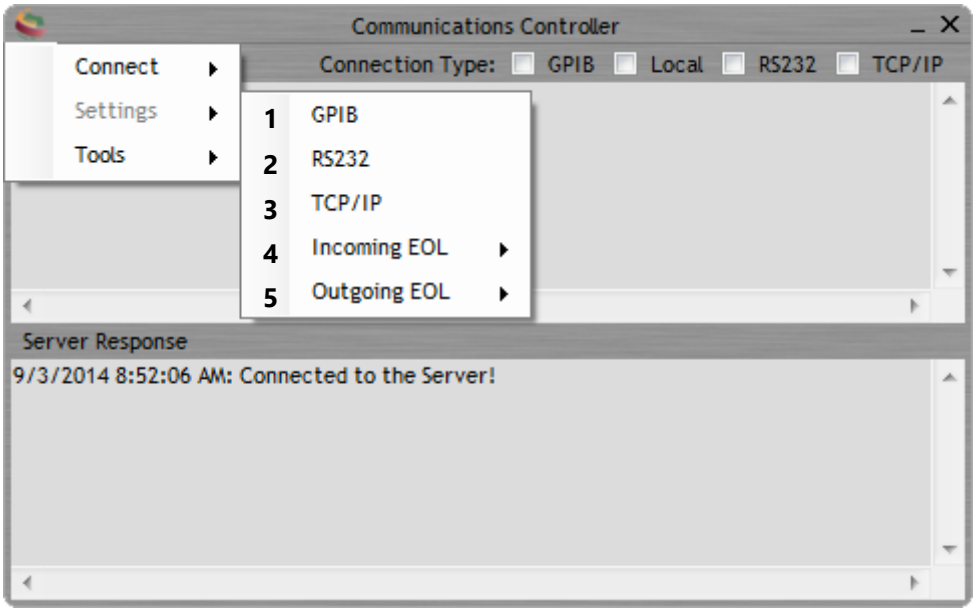
b) Menu



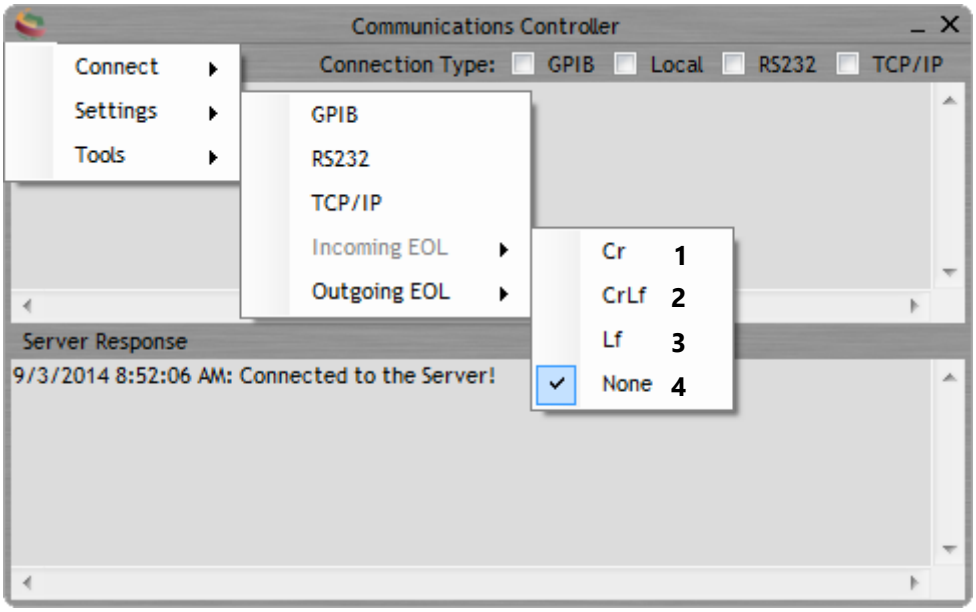
1 Connect - Displays option to connect to the SemiServer.
2 Settings - Displays varies settings the user can modify.
3 Tools - Displays tools available to the user.



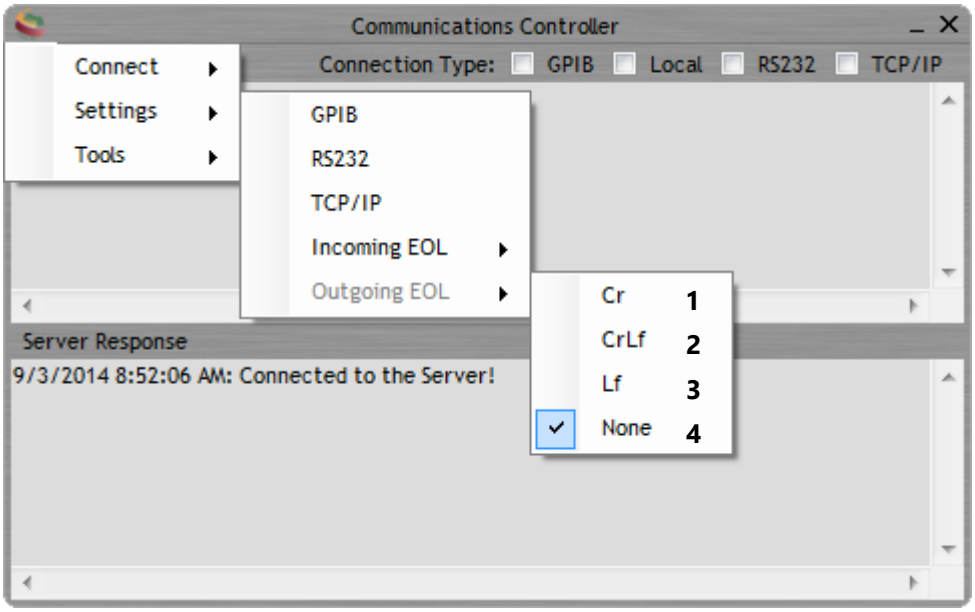
1 Server - Used to connect or reconnect to the SemiServer



1 GPIB - Display dialog to adjust current GPIB configuration settings.
2 RS232 - Display dialog to adjust current RS232 configuration settings.
3 TCP/IP - Display dialog to adjust current TCP/IP configuration settings.
4 Incoming EOL - Options for incoming message end of line termination character.
5 Outgoing EOL - Options for outgoing message end of line termination character.



1 Cr - Set incoming message end of line character to carriage return.
2 CrLf - Set incoming message end of line character to carriage return and line feed.
3 Lf - Set incoming message end of line character to line feed.
4 None - Set incoming message end of line character to nothing.



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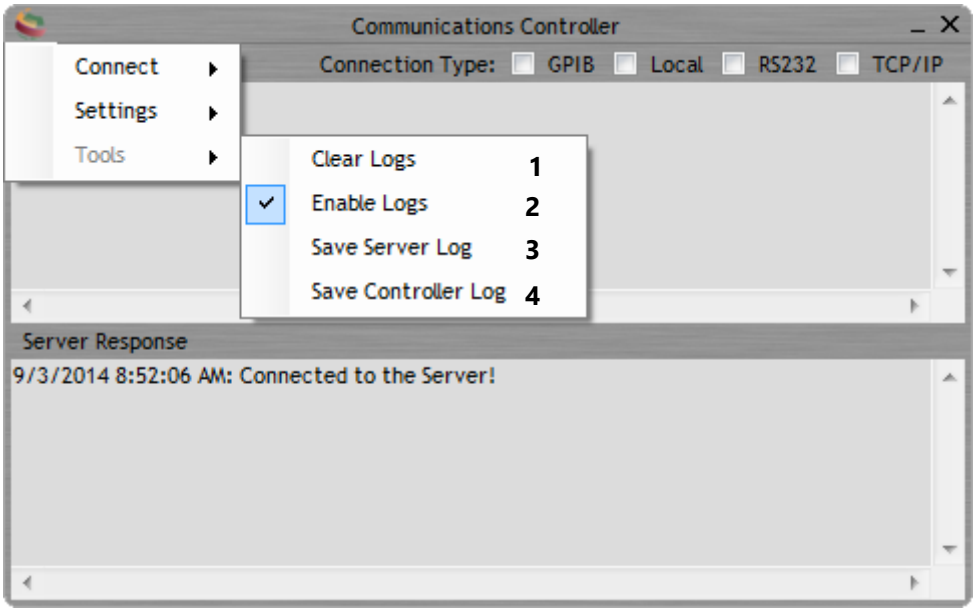
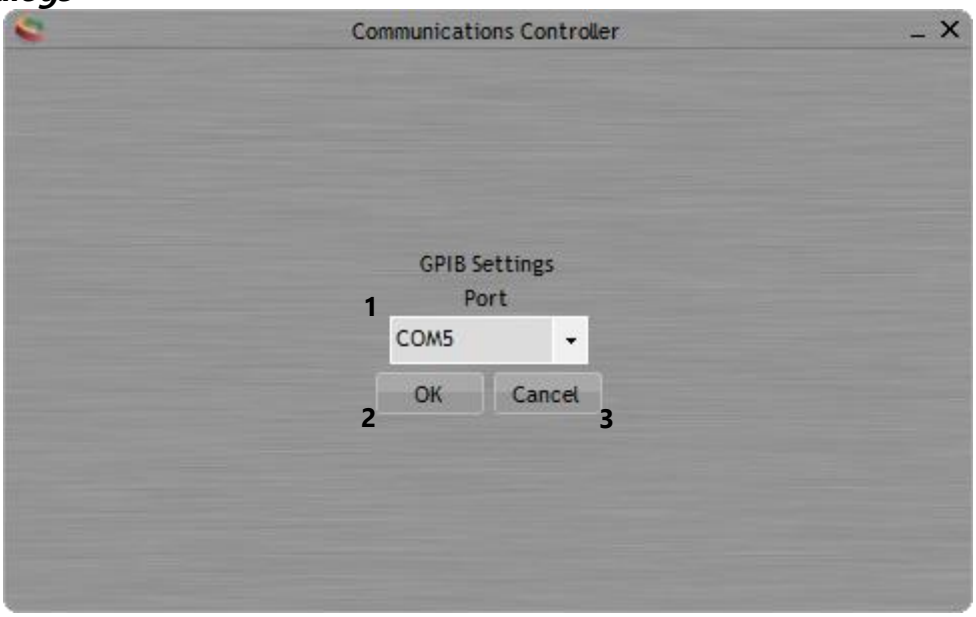
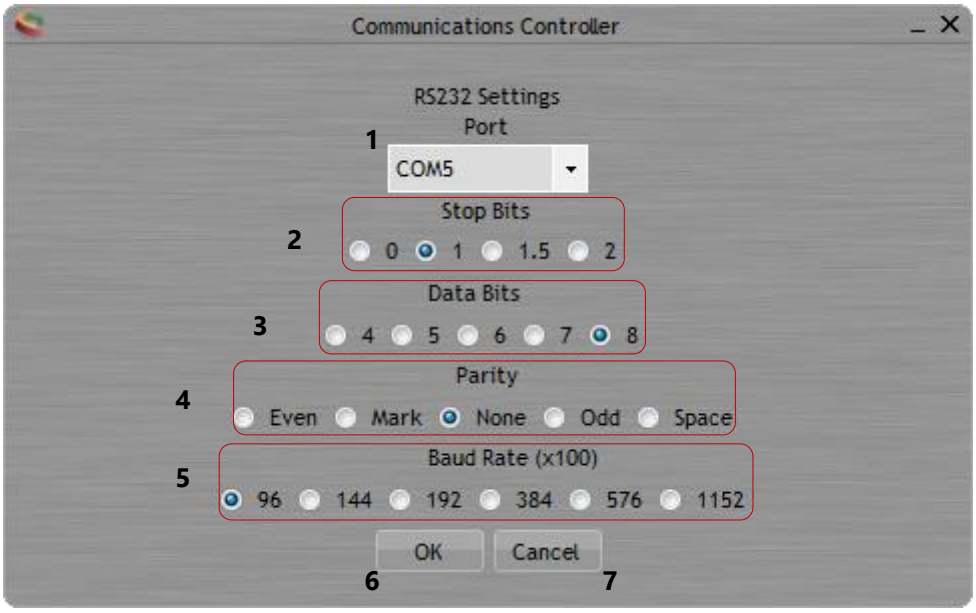


1 Clear Logs - Clear the controller and server logs.
2 Enable Logs - Specify to use log for all messages or only error messages.
3 Save Server Log - Save all messages displayed in server log.
4 Save Controller Log - Save all messages displayed in controller log.

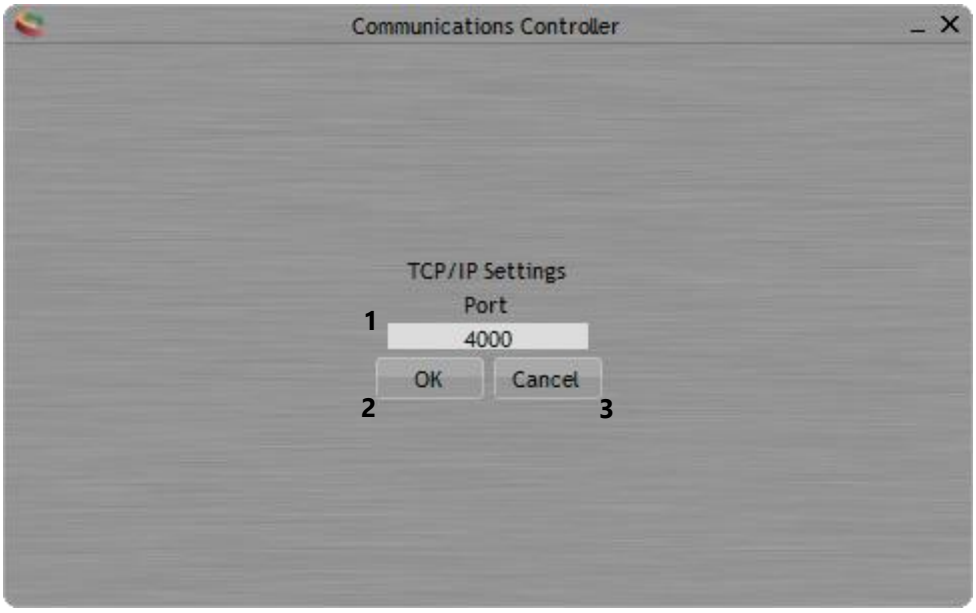
c) Dialogs



1 Specify communication port to use for GPIB communication.
2 Set communication port.
3 Cancel changing GPIB communication port.



1 Specify communication port to use for GPIB communication.
2 Specify number of stop bits for RS232 communication.
3 Specify number of data bits for RS232 communication.
4 Specify parity type for RS232 communication.
5 Specify baud rate for RS232 communication.
6 OK - Set RS232 settings.
7 Cancel - Cancel changing RS232 settigns.



1 Specify TCP/IP communication port.
2 OK - Set TCP/IP communication port.
3 Cancel - Cancel changing TCP/IP communication port.